

Title (en)  
DYNAMIC BLOCKCHAIN DATA STORAGE BASED ON ERROR CORRECTION CODE

Title (de)  
DYNAMISCHER BLOCKCHAIN-DATENSPEICHER AUF DER GRUNDLAGE EINES FEHLERKORREKTURCODES

Title (fr)  
STOCKAGE DE DONNÉES DE CHAÎNE DE BLOCS DYNAMIQUE BASÉ SUR UN CODE CORRECTEUR D'ERREUR

Publication  
**EP 3769235 A4 20210519 (EN)**

Application  
**EP 19849975 A 20191113**

Priority  
CN 2019118180 W 20191113

Abstract (en)  
[origin: WO2020035093A2] Disclosed herein are methods, systems, and apparatus, including computer programs encoded on computer storage media, for storing blockchain data. One of the methods includes receiving a request for performing error correction coding (ECC) to one or more blocks of a blockchain, obtaining the one or more blocks based on blockchain data received from at least one blockchain node of the blockchain network, and performing ECC of the one or more blocks to generate one or more encoded blocks, wherein a code rate of the one or more encoded blocks equals a minimum number of honest blockchain nodes required by the blockchain network and a total number of blockchain nodes of the blockchain network.

IPC 8 full level  
**H04L 9/32** (2006.01); **G06F 11/18** (2006.01); **G06F 16/901** (2019.01); **G06F 21/64** (2013.01); **H04L 29/06** (2006.01)

CPC (source: CN EP KR US)  
**G06F 11/10** (2013.01 - CN); **G06F 11/1044** (2013.01 - KR); **G06F 11/1076** (2013.01 - US); **G06F 11/182** (2013.01 - EP KR); **G06F 16/2365** (2018.12 - US); **G06F 21/645** (2013.01 - CN EP KR); **H03M 13/154** (2013.01 - US); **H04L 9/3239** (2013.01 - EP); **H04L 9/50** (2022.05 - EP); **H04L 63/12** (2013.01 - CN KR); **H04L 63/123** (2013.01 - EP); **G06F 2211/004** (2013.01 - CN); **G06F 2211/005** (2013.01 - CN); **H04L 2209/34** (2013.01 - EP)

Citation (search report)  
• [X] CN 109871366 A 20190611 - UNIV EAST CHINA NORMAL  
• [A] PERARD DORIANE ET AL: "Erasure Code-Based Low Storage Blockchain Node", 2018 IEEE INTERNATIONAL CONFERENCE ON INTERNET OF THINGS (ITHINGS) AND IEEE GREEN COMPUTING AND COMMUNICATIONS (GREENCOM) AND IEEE CYBER, PHYSICAL AND SOCIAL COMPUTING (CPSCOM) AND IEEE SMART DATA (SMARTDATA), IEEE, 30 July 2018 (2018-07-30), pages 1622 - 1627, XP033556426, DOI: 10.1109/CYBERMATICS\_2018.2018.00271  
• See references of WO 2020035093A2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2020035093 A2 20200220; WO 2020035093 A3 20200903**; AU 2019321746 A1 20210527; CA 3098936 A1 20200220; CN 111386519 A 20200707; CN 111386519 B 20220415; EP 3769235 A2 20210127; EP 3769235 A4 20210519; EP 3769235 B1 20220706; JP 2021528884 A 20211021; JP 7159348 B2 20221024; KR 102430135 B1 20220805; KR 20210058746 A 20210524; SG 11202010722R A 20201127; US 11030044 B2 20210608; US 2021073075 A1 20210311

DOCDB simple family (application)  
**CN 2019118180 W 20191113**; AU 2019321746 A 20191113; CA 3098936 A 20191113; CN 201980004885 A 20191113; EP 19849975 A 20191113; JP 2020560985 A 20191113; KR 20207031495 A 20191113; SG 11202010722R A 20191113; US 202017086030 A 20201030